

What is claimed is:

1. An optical recording medium recorded and reproduced with irradiation of light thereon, said irradiation of light being made by an objective lens of which numerical aperture is larger than 1 to record and reproduce recorded pits, comprising at least a silicon layer and a silicon oxide layer being formed from the light irradiation side, in that order.

2. An optical recording medium according to claim 1, wherein said recorded pits are recorded by changing said silicon layer into silicon oxide.

3. An optical recording medium according to claim 1, wherein said silicon layer has formed thereon a protective layer of which refractive index is larger than a numerical aperture of said objective lens.

4. An optical recording medium according to claim 2, wherein said silicon layer has formed thereon a protective layer of which refractive index is larger than a numerical aperture of said objective lens.

5. An optical recording and reproducing method for recording and reproducing an optical recording medium with irradiation of light, said light being irradiated through an objective lens of which numerical aperture is larger than 1 and

using said optical recording medium in which recorded pits are recorded and reproduced, wherein said optical recording medium has at least a silicon layer and a silicon oxide layer formed thereon from the light irradiation side, in that order, said recorded pits being formed by changing said silicon layer into silicon oxide.